VILLAGE OF ROAMING SHORES
Drinking Water Consumer Confidence Report
For 2019

The Village of Roaming Shores has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

What's the source of your drinking water?
The Village of Roaming Shores receives its drinking water from a bulk water agreement with Aqua Ohio. Aqua-Ohio Water Company treats water drawn from the waters of Lake Erie. The waters of Lake Erie are considered a surface water source and require extensive treatment before it can be used as a drinking water. They treat water prior to traveling through part of more than 1,550 miles distribution system to your homes.
(Source: LAKE ERIE – Ashtabula)

Our Emergency Water Supply.
The Village of Roaming Shores also has a ***back-up*** connection with the Village of Rock Creek. During 2012, we used – 0 - gallons from this connection over – 0 - days. This report does not contain information on the water quality received from the Village of Rock Creek, but a copy of their consumer confidence report can be obtained by contacting the Village office at 440-563-3992.

What are sources of contamination to drinking water?
The sources of drinking water both tap water and bottled water includes rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban Storm water runoff, and septic systems; (E) radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791)

Who needs to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infection. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

About your drinking water.
The EPA requires regular sampling to ensure drinking water safety. The Village of Roaming Shores conducted sampling for ***bacteria, chlorine residual*** and Aqua- Ohio conducted sampling for ***inorganic; synthetic organic; volatile organic; radiological;*** contaminant sampling during 2019 Samples were collected for a total of more than 160 different contaminants most of which were not detected in the Aqua- Ohio water supply. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

Listed below is information on those contaminants that were found in the Village of Roaming Shores Drinking Water.

Contaminant (units)	MCLG	MCL	Level Found	Range of Detection	Violation	Year Sampled	Typical Source of Contaminants
Microbiological Contaminants							
Total Organic Carbon[1]*	NA	TT	0.75	0.57 - 0.97	No	2019	Naturally present in the environment
Turbidity (NTU)[2]*	NA	TT	0.12	0.06 - 0.12	No	2019	Soil runoff

Turbidity* (% samples meeting standard)	NA	TT	100	100 - 100	No	2019	Soil runoff
Inorganic Contaminants							
Fluoride* (ppm)	4	4	1.01	0.80 - 1.19	No	2019	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate* (ppm)	10	10	0.77	0.50 - 0.77	No	2019	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits
Barium* (ppm)	2	3	0.020	NA	No	2019	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium* (ppb)	100	100	1.2	NA	No	2019	Discharge from steel and pulp mills; Erosion of natural deposits
Lead and Copper							
Contaminants (units)	Action Level (AL)	Individual Results over the AL		90% of test levels were less than	Violation	Year Sampled	Typical source of Contaminants
Lead (ppb)[3]	15	0		2.9	No	2019	Corrosion of household plumbing systems; Erosion of natural deposits
	0 out of 10 samples exceeded the action level of 15 ppb.						
Copper (ppm)	1.3	0		0.22	No	2019	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
	0 out of 10 samples exceeded the action level of 1.3 ppm.						
Disinfection Byproducts							
TTHMs [Total Trihalomethane] (ppb)	NA	80	71.3	2.8 - 99.8	No	2019	By-product of drinking water chlorination.
HAA5 [Haloacetic Acids] (ppb)	NA	60	50.1	26.5 - 73.6	No	2019	By-product of drinking water chlorination.
Volatile Organic Contaminants							
Chloroform* (ppm)	NA	NA	11.8	NA	No	2019	By-product of drinking water chlorination.
Bromodichloromethane* (ppm)	NA	NA	5.7	NA	No	2019	By-product of drinking water chlorination.
Dibromochloromethane* (ppm)	NA	NA	1.3	NA	No	2019	By-product of drinking water chlorination.
Residual Disinfectants							
Total Chlorine (ppm)	MRDL	MRDLG	1.3	0.9 - 1.5	No	2019	Water additive used to control microbes
	4	4					
Unregulated Contaminants*							
Manganese (ppb)			9.042	0.668 - 31.9	Unregulated contaminants monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants. In 2019, Roaming Shores participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR4). For a copy of the results please call		
Haloacetic Acids (HAA5) (ppb)			8.8	0.0 - 38.1			
Haloacetic Acids (HAA9) (ppb)			6.0	0.0 - 38.1			
Haloacetic Acids (HAABr6) (ppb)			1.8	0.0 - 7.1			

*These test results come from the wholesaler, Ashtabula county water system.

[1] The value reported under "Level Found" for Total Organic Carbon (TOC) is the lowest ratio between the percentages of TOC actually removed to the percentage of TOC required to be removed. Our water system is in compliance with TOC removal requirements if the value is greater than one (1). A value of less than one (1) indicates a violation of the TOC removal requirements.

[2] Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. As reported above, the highest recorded turbidity result for 2019 was 0.12 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100.0%.

[3] If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Aqua Ohio - Ashtabula Water Treatment Plant is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods and steps you can take to minimize

exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at http://www.epa.gov/safewater/lead.

[4] Under the Stage 2 Disinfectants/Disinfection Byproducts Rule (D/DBPR), our public water system was required by USEPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE), and is intended to identify locations in our distribution system with elevated disinfection byproduct concentrations. The locations selected for the IDSE may be used for compliance monitoring under Stage 2 DBPR, beginning in 2012. Disinfection byproducts are the result of providing continuous disinfection of your drinking water and form when disinfectants combine with organic matter naturally occurring in the source water. Disinfection byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Haloaetic Acids (HAA5). USEPA sets standards for controlling the levels of disinfectants and disinfectant byproducts in drinking water, including both TTHMs and HAA5s.
Aqua Ohio - Ashtabula Water Treatment Plant also monitored for Cryptosporidium in the source water during 2018. Cryptosporidium was detected in one sample of nine collected from the raw water. It was not detected in the finished water. Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100% removal. Monitoring of source water indicates the presence of these organisms. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Sources of Supply -- The Aqua Ohio - Ashtabula water system uses surface water drawn from two intakes in Lake Erie. Ashtabula also has an emergency interconnection with the City of Conneaut. The Ashtabula water system's drinking water source protection area is highly susceptible to contamination from a number of sources such as municipal wastewater treatment discharges, industrial wastewater discharges, runoff from residential and urban areas, and contaminated river sediment. By their nature, surface waters are accessible and can be readily contaminated by chemicals and pathogens with relatively short travel times from source to intake. The potential for water quality impacts can be further decreased by implementing measures to protect Lake Erie. The Roaming Shores Water System is supplied by Aqua Ohio through the Ashtabula County Water System.

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In order to ensure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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The Roaming Shores Water System had an unconditioned license to operate our water system.

While we do not hold regular meetings, customers are encouraged to participate by contacting the Village of Roaming Shores.

Definitions:
Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Maximum Contaminant level (MCL): The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum Residual Disinfectant Level Goal (MRDLG): The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Contact Time (CT) means the mathematical product of a “residual disinfectant concentration” (C), which is determined before or at the first customer, and the corresponding “disinfectant contact time” (T).
Microcystins: Liver toxins produced by a number of cyanobacteria. Total microcystins are the sum of all the variants/congeners (forms) of the cyanotoxin microcystin.
Cyanobacteria: Photosynthesizing bacteria, also called blue-green algae, which naturally occur in marine and freshwater ecosystems, and may produce cyanotoxins, which at sufficiently high concentrations can pose a risk to public health.
Cyanotoxin: Toxin produced by cyanobacteria. These toxins include liver toxins, nerve toxins, and skin toxins. Also sometimes referred to as “algal toxin”.
Parts per Million (ppm) or Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.
Parts per Billion (ppb) or Micrograms per Liter (µg/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
The “<” symbol: A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.
Picocuries per liter (pCi/L): A common measure of radioactivity.

In 2019 the Village of Roaming Shores participated in the fourth round of the Unegulated Contaminant Monitoring Rule (UCMRS). For a copy of the results please call Raymond Nevison at 440-474-2302.